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ABSTRACT

This study was designed to determine what types of evaluation practices are being carried out in schools involved in flexible scheduling and independent study. A questionnaire, designed to determine if a flexibly scheduled school had included the independent study phase of instruction and if an evaluation program for this phase exists, was sent to 149 flexibly scheduled secondary schools in 23 States. Only one school indicated that it was equipped to assess participants in both individual and independent study. The majority of the 26 schools that indicated they had an evaluation program used tests to measure achievement and attitude surveys to determine whether or not students and staff wanted to continue with independent study programs. (Author/MLF)

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INDEPENDENT STUDY PROGRAM
EVALUATION PRACTICES

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INTRODUCTION

The desire to obtain and maintain educational programs of an acceptable quality has resulted in the introduction of a variety of new instructional programs and practices in some public and non-public secondary schools. These programs are not all alike because they are varied in their aims, objectives, content, approach and grade level.

One of the forms that some of the new instructional programs have taken has been termed "flexible scheduling." A major component of the flexibly scheduled school is the independent study phase of instruction. This particular phase is usually included in the program to aid in the individualization of instruction.¹

Of all of the aspects of a flexibly scheduled school the concept of independent study provides the greatest departure from the instructional programs of traditional secondary schools. The principle of individualizing instruction combined with the notion that the students need to assume a greater share of the responsibility for their own learning has not been accepted by many educators or laymen. Consequently, independent study has become a critical issue for all persons concerned about secondary education.

In order to obtain a better understanding of independent study in a flexibly scheduled school it is necessary to briefly discuss flexible scheduling and the phases of instruction that provide the basis for such an educational program.

¹Edward G. Buffie, "The Administrator's Role", Independent Study, eds. David W. Beggs, III, and Edward G. Buffie (Bloomington: Indiana University Press, 1965), p. 211.

Flexible Scheduling

A flexibly scheduled school is usually based upon the notion that each properly taught subject will include four basic types of instruction. The four types are:

- (1) presentation of information in large groups of students;
- (2) discussion of experiences or ideas in small groups of students;
- (3) laboratory experiences, manipulative activities for students to perform, done in varying group sizes or individually depending upon the nature of the activity and the available facilities; and
- (4) independent study which is usually an activity similar to the laboratory experiences but characteristically the student is not as dependent upon the teacher as much as in the other phases of instruction.²

The presentation and discussion phases of instruction always involve a teacher or teachers and groups of students and therefore need to be scheduled by some central source. The laboratory phase of instruction is sometimes a group activity and at times an individual activity. The amount of experience that the teacher and student have had with the activity are important factors in determining whether or not this phase of instruction will be scheduled. The independent study phase is an activity that depends upon the student's varying needs and interests and therefore cannot be effectively or efficiently scheduled by a central source.

²R. N. Bush and Dwight Allen, A New Design for High School Education (New York: McGraw Hill Book Co., 1964), pp. 35-38.

The independent study phase of instruction is similar to the laboratory phase of instruction and is often referred to as an aspect of the laboratory instruction phase. The major distinction between the two phases of instruction is that the student is less dependent upon the teacher in independent study than in the laboratory phase. The planning, directing, performing and evaluation tasks are basically the responsibility of the student in the independent study phase of instruction. The role of the teacher more resembles that of a consultant or resource person than an instructional manager. A student needs teachers when seeking procedural authority, definition of a problem, developing ideas etc. The skillful teacher is expected to plan, counsel, advise and provide assistance at times to prevent students from engaging in unproductive activity.³

In a flexibly scheduled school a major portion of time that is designated for individual study, independent study, and social interaction activities is often referred to as unscheduled time, student scheduled time, free time, independent directed study time, or independent study time.

Before discussing the issue in any greater depth it is important that the concept of independent study and other related terms and phrases be defined.

Individualized Instruction. Individualized instruction is considered to be a method of relating the individual student's level of mental skill, intellectual development, and social development to the instructional topic.⁴

³William W. Griffin, "Schedules, Bells, Groups, and Independent Study", Independent Study, David W. Beggs, III, and Edward G. Buffie (Bloomington: Indiana University Press, 1968), p. 5.

⁴Robert J. Havighurst, Human Development and Education (New York: David McKay Co., Inc., 1953), p. 16.

Acceptance of this definition clearly allows the concept of independent study to be an integral part of a program dedicated to the individualization of instruction.

Independent Study. Although the independent study phase of instruction is more often characterized by purposes and activities than it is defined, it is necessary to examine several definitions.

Allen and Bush say that independent study is,

Instruction in which the student engages in activities independent of other students and in a large part independent of immediate teacher direction....⁵

This definition is important in that it indicates that the student is to be independent from immediate teacher direction.

Griffin states that,

Independent study means a learning situation within the school day which allows a student to develop personal competencies through experiences as an individual, but in interaction with others when needed.⁶

This definition indicates that the situation could possibly be managed toward achieving the goal of developing the skills necessary for independent study and that it need not be carried out completely alone.

Alexander and Hines feel that although,

Independent study, briefly stated, is self-directed learning activity,⁷

a more appropriate definition for a school setting is that;

⁵Bush and Allen, Op.Cit., p. 35.

⁶William M. Griffin, "Schedules, Bells, Groups, and INdependent Study", Independent Study, David W. Beggs, III, and Edward G. Buffie (Bloomington: Indiana University Press, 1968), p. 2.

⁷William M. Alexander, Vynce A. Hines and Associates, Independent Study in Secondary Schools (New York: Holt, Rinehart and Winston, Inc., 1967), p. 1.

independent study is considered by us to be a learning activity largely motivated by the learner's own aims to learn and largely rewarded in terms of its intrinsic values. Such activity as carried on under the auspices of secondary schools is somewhat independent of the class or other group organizations dominant in past and present secondary school instructional practices, and it utilizes the services of teachers and other professional personnel primarily as resources for the learner.⁸

This definition by Alexander and Hines is the one that is accepted for this project.

Individual Study. Individual study is instruction in which the student engages in learning activities individually under the direction of a teacher.⁹

Individual study is often confused with independent study. An examination of the role expectations of the teacher and student within these two activities points up the significant differences.

The teacher involved in independent study performs an advisory role whereas in the individual study the teacher assigns or prescribes learning experiences in a managerial role. The student in independent study is expected to design, direct, perform and evaluate a learning experience whereas in the individual study the student usually only performs the assigned activity.

Evaluation

The need for a systematic program of evaluation is important in all phases of instruction but it is an especially important aspect of the independent study phase of instruction. This departure from the traditional mode of instruction needs to be evaluated because (a) more people are

⁸Ibid., p. 12.

⁹Jay W. Formsma, "Senior High School Uses of Flexible Programming in Independent Study", Independent Study, David W. Beggs, III, and Edward G. Buffie (Bloomington: Indiana University Press, 1965), p. 114.

making decisions, (b) teachers need new kinds of information, and (c) the public needs to know if it can support such a program.¹⁰

The types of evaluation that need to occur are both internal and external. The internal component provides information necessary to assess the consistency of the mechanics of the program. These data could provide clues that aid in the organizational aspects of the program. The external component includes instruments designed to evaluate the input as well as the output. The objectives, resources and personnel are considered to be input items that need evaluation. The output would include the accomplishments. In the independent study phase of instruction this would include the process of learning as well as the product.¹¹ Another aspect of external evaluation would be to compare the input and output with a control group. The laboratory setting is not adequate for this situation and control schools with similar inputs are difficult to obtain.

There has been very little published regarding the processes necessary to determine the value of independent study programs. One of the major difficulties is that the independent study program is not independent of the other phases of instruction. Some evaluation techniques have been developed and reported in the related literature but in general it is the absence of selections describing independent study program evaluation practices that is noteworthy.

Some efforts have been made to design evaluation programs for the entire flexible scheduling program in a school but the systematic eval-

¹⁰ Jack Merwin in an address to high school principals, in Minneapolis, February, 1969.

¹¹ Ibid.

uation techniques necessary to evaluate the independent study phase of instruction are generally missing. This does not mean to imply that the efforts of Chickering, McLeod, Murphy, Ketcherside, and others have not provided assistance to those who are interested in the evaluation of independent study programs. What is lacking is some form of an evaluation package that may be of value to those persons directly involved with flexible scheduling and independent study.

The lack of a planned program of evaluation within the independent study phase of instruction of a school does not necessarily imply that there is no evaluation taking place. The students, teachers and administrators are constantly faced with decision-making situations and each decision is based upon some form of evaluation.

The requirements of a systematic and thorough evaluation program necessitate a variety of instruments and techniques. It is possible that new instruments and techniques will need to be developed.

PROJECT

In an attempt to help fill the void a study was designed to determine what types of evaluation practices are being carried out by the practitioners in the schools involved in flexible scheduling and independent study. A questionnaire was developed and sent to selected flexibly scheduled schools in an effort to determine which schools have developed an evaluation program for the independent study phase of instruction and to obtain a brief description of important aspects of the program.

Selection of Schools

The schools that were included in the initial survey were identified by State Departments of Education in the Upper Midwest, the Educational

Research and Development Council of the Twin Cities, and a private corporation, Educational Coordinates. These organizations identified what were considered to be 149 flexibly scheduled secondary schools located in 23 states (listing in Appendix A).

Questionnaire

The questionnaire was developed and piloted in three schools. The final questionnaire form resulted from the pilot project and consultation with interested persons. The questionnaire was brief because the main concerns were the identification of schools that have developed an evaluation program, a brief summary of the programs, and the quick return of the questionnaire. A copy of the questionnaire is located in Appendix B.

The cover letter for the questionnaire indicated that the Educational Research and Development Council of the Twin Cities endorsed the study. It was also indicated, in the cover letter, that the respondents would receive a summary of the findings of the survey.

The questionnaire was designed to determine if a flexibly scheduled school had included the independent study phase of instruction and if an evaluation program for this phase exists. The degree of student and staff participation, enrollment, number of teachers, and the grade levels of the schools surveyed were also reported.

FINDINGS

The total number of schools responding was 107; for a 72 percent overall return. Of the 107 responding schools, 42 were Minnesota schools for an 86 percent response. Although all of the schools surveyed were considered by other sources to be flexibly scheduled, only 95 of the 107

respondents are flexibly scheduled according to the survey results. Of these 95 flexibly scheduled schools, 88 have the independent study phase of instruction. This indicates that 7 percent of the flexibly scheduled schools do not have independent study programs. Ten percent of the responding Minnesota schools do not have an independent study program.

Organizational Patterns

The grade level organization patterns of schools utilizing independent study were varied but the 7 to 9, 7 to 12, 9 to 12, and 10 to 12 patterns prevailed. The most common pattern was found to be the 9-12 grade level pattern. This organizational pattern accounted for 33 percent of the total number of schools using independent study. Only 1 school indicated that it was an ungraded school. This, of course, does not rule out the possible existence of ungradedness within the other school systems surveyed. Schools were not polled on the question of ungradedness.

Students and Teachers

The student enrollments of the flexibly scheduled schools with independent study ranged from 70 to 3500 students. The median size enrollment of these schools was 930 students with Q_3 and Q_1 falling at 1288 and 460 students respectively.

The number of teachers employed by each of these schools ranges from 10 to 175. The median teaching staff size is 48 teachers with 77 and 30 becoming the Q_3 and Q_1 figures. Statistically speaking; the median school has 930 students and 48 teachers, the Q_3 school has 1288 students and 77 teachers, and the Q_1 school has 460 students and 30 teachers. This information indicates that the smaller the school the greater the number of teachers per pupil unit. Theoretically, the Q_1 school has 51.6 teachers per 1,000 students; the median school has 59.8 teachers per 1,000 students,

and the Q₁ school has 65.2 teachers per 1,000 students. Staffing practices related to the para-professional and non-professional were not investigated.

Much of the literature indicates that all students should participate in the independent study program. About one-quarter of those schools with independent study did not have all students in the independent study program. When this occurred the schools usually had less than one-third of the students participating in independent study.

Two schools indicated that all students had unscheduled time and that participation in independent study was optional. The independent study in these cases was done in relationship to a particular course or subject. Seventy-three percent of the responding schools have the entire student body involved in independent study.

The teachers in the schools with independent study programs do not always participate in the program. Seventy-two percent of the schools indicated that all teachers were involved with independent study, while the remaining 27 percent indicated that their entire teaching staffs were not involved with the program.

One of the reporting schools did not indicate the degree of participation of either the students or the teaching staff. This accounts for about one percent in each category.

Although approximately three-fourths of the schools had either all of their students or teaching staffs participating in independent study, these two program characteristics did not necessarily occur in the same school. Sixty-eight percent of the independent study schools had all of the students and staff involved in the program. Twenty-three percent of the schools did not have all of either groups, students and teachers.

Schools that had all of its teachers but not all of its students in independent study programs accounted for 3 percent of the total. A situation that is not discussed or described in the literature is one in which all of the students and not all of the teachers participate in independent study. This occurs in 5 percent of the schools. Again, this data accumulates to 99 percent with the non-reporting school making up the missing one percent.

Evaluation Programs

The number of schools with independent study programs numbered 88 but only 26 of these have a program of evaluation according to the respondents. This figure represents 30 percent of the schools on the program of independent study (a listing appears in Appendix C).

The reported evaluation procedures used by the reporting schools may be placed into three broad categories in which the major variable depends upon who performs the assessment. The categories are procedures used by administrators, students and teachers. There is a strong probability that parental evaluation takes place and it may take the form of a planned program. If it does exist, however, it was not reported as a part of the schools' practices.

Following is a summary of the evaluation procedures that were reported to the writer.

- I. Evaluation procedures and practices reported by the administrators.
 - A. The design and performance of the evaluation programs that were authorized by the administrations were carried out through the use of:
 1. Services of non-school persons, such as university professors;
 2. local administrators;
 3. joint teacher and administrator committee;
 4. teacher committees; and
 5. student committees.

- B. The programs and reporting practices reported focused upon the following areas:
1. Student behavior during the student scheduled time periods was assessed by obtaining information from;
 - a. informal observation,
 - b. shadow studies (students are followed without their knowledge and their behavior recorded),
 - c. student log of time use,
 - d. surveys of student initiated activities,
 - e. interviews of students, teachers, and administrators, and
 - f. examining cause and frequency of disciplinary contacts.
 2. A change in attitude, knowledge, and skills was assessed by the use of testing programs and inventories which included:
 - a. achievement tests;
 - (1) Iowa Tests of Educational Development (ITED)¹² and
 - (2) Stanford Achievement Test (SAT),¹³
 - b. attitude toward program;
 - (1) surveys,
 - (2) follow-up studies, and
 - (3) attendance patterns,
 - c. critical thinking;
 - (1) Watson Glaser Critical Thinking Appraisal,¹⁴
 - d. study skills;
 - (1) Brown-Holtzman Survey of Study Habits and Attitudes¹⁵ and
 - (2) surveys of facility use,
 - e. trends in grade point averages;
 - f. an increased use by teachers of in-service activities designed to improve their effectiveness in individual study;
 - (1) attendance at meetings,
 - (2) use of behavioral objectives, and
 - (3) use of learning packages, and

¹²E. F. Lindquist (ed.), The Iowa Tests of Educational Development (Chicago: Science Research Associates, 1952).

¹³T. Kelley, R. Madden, E. Gardner, L. Terman, and G. Ruck, Stanford Achievement Test, (Yonkers: World Book Co., 1953).

¹⁴Goodwin Watson and Edward Glaser, Watson Glaser Critical Thinking Appraisal (Yonkers: World Book Co., 1952).

¹⁵William Brown and Wayne Holtzman, Brown-Holtzman Survey of Study Habits and Attitudes (New York: Psychological Corporation, 1956).

- g. trends in student course selection when viewed in terms of believed effectiveness of teachers in independent study roles.
- II. Evaluation procedures and practices reported to be used by teachers. The programs and reporting practices focused upon the following areas:
 - A. Student behavior during the student scheduled time periods was assessed by:
 - 1. informal observation,
 - 2. describing the amount and type of student and teacher contact time, and
 - 3. small group discussions with students.
 - B. A change in attitude, knowledge, and skills was assessed by:
 - 1. describing student achievement on teacher designed and standardized instruments designed to measure knowledge retention in subject areas and
 - 2. the subjective evaluation of the quality of independent study activity products.
- III. Evaluation procedures and practices reported to be used by students. The programs and reporting practices focused upon student behavior during the students' unscheduled time periods. This was assessed by:
 - 1. self evaluation of time use,
 - 2. conferences with teachers,
 - 3. small group discussions with other students, and
 - 4. designing and administering questionnaires for students and staff members.

One school indicated that it did not have a program of evaluation but that it had developed an extensive set of criteria which are to be used in the evaluation process. This very important step should be an integral part of all programs of evaluation.

The results of the questionnaire indicate that much of the effort that has been devoted to evaluation has been aimed at the individual study aspect. In an effort to more clearly note the differences and similarities that exist among evaluation programs, the information obtained is described in terms of its applicability to individual and independent study components

and is further analyzed in terms of attitudes, skills, and knowledge.

Attitude Assessment

An examination of the reported practices designed to measure the attitudes of the students, teachers, and parents toward individual study and independent study reveals that there are no differences in actual practice. The techniques and instruments available are adequate to the extent that information can be obtained to aid decision makers in determining the attitude of the participants in individual study as well as independent study.

Student attitude according to the respondents can be described by:

1. examining the cause and frequency of disciplinary contacts;
2. inventory of student attitude toward program;
3. summaries of information received from small group and student-teacher conferences;
4. course enrollment trends;
5. attendance patterns, in-school patterns, daily attendance and drop-outs; and
6. follow-up studies of graduates.

Teacher attitude can be effectively determined by surveys and their participation in voluntary in-service programs designed to increase teacher effectiveness in this phase of instruction. Parent attitude can also be measured through surveys.

Skill Assessment

How effectively a student has learned to utilize the resources of the school, including teachers, facilities, materials, and time, has been documented by recording the student's contact with the teachers, facilities,

and materials during the unscheduled time of the student. This has been accomplished through student logs, shadow studies, observations and interviews. Also, some learning skills are measured by using such standardized instruments as The Brown-Holtzman Survey of Study Habits and Attitudes¹⁶ and the Watson-Glaser Critical Thinking Appraisal.¹⁷

The nature of student planning of learning activities can be assessed by using a questionnaire that asks the student to describe student initiated study activities. The results may provide some clues as to the kinds of learning experiences that students are planning in their effort to become independent learners.

Knowledge Assessment

It is in the area of the assessment of the students' acquisition of knowledge that there exists the most emphasis and also the greatest differences among individual and independent study. Individual study activities are usually cognitive in nature. A majority of the schools that reportedly have evaluation programs also reported that this was a major component of the program. Most of the practices in this area focused upon teacher designed or commercially prepared instruments aimed at determining just how well students in an independent study program performed compared to external norms. The ITED¹⁸ dominates the scene. Another criterion that has been studied is the grade point average trend of the student body.

Knowledge obtained in the independent study domain is measured subjectively by some school personnel. It is through a subjective analysis of the product

¹⁶Brown and Holtzman, op.cit.

¹⁷Watson and Glaser, op.cit.

¹⁸Lindquist, op.cit.

of an independent study project that teachers assign grades and or credit. Some schools evaluate the independent study project only in terms of the student's reported evaluation.

It is evident that the types of evaluation procedures that exist for determining progress in individual study and independent study are dissimilar and measure different things. Significantly, none of the schools reportedly use both systematic standardized testing programs and subjective evaluation. The writer does not view these two important evaluation procedures as being mutually exclusive as evidently do so many of the respondents.

SUMMARY

Based upon the results of the questionnaire study a set of evaluative practices to assess effectiveness of independent study and individual study were found to be in use among schools surveyed. (Only one school indicated that it was equipped to assess the skills, knowledge, and attitudes of its participants in both individual and independent study, but this school also indicated that there were almost no independent study projects taking place and that the emphasis was on the individual study phase.

The majority of the 26 schools that indicated they had an evaluation program used standardized tests to measure achievement in cognitive areas and attitude surveys to determine whether or not students and staff wanted to continue with independent study programs.

Among the responses of those schools that did not report the existence of a program of evaluation, there were several comments suggesting the dire need for such programs and that assistance was needed to implement such

programs.

The Future

In this so-called "age of accountability" it is imperative that the educators skilled in program evaluation work hand-in-hand with the practionners in developing and implementing a program of evaluation for the independent study programs. Unless this combined effort is consumated the schools may resort to teaching only those things that can be measured, easily.

The Twin City Education Research and Development Council has an opportunity to make a major contribution to education by marshalling its available resources to develop an independent study evaluation program. No other agency or institution has the needed large number of public and non-public schools and a cooperating university necessary to accomplish the task.

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APPENDIX A

Schools Surveyed

<u>City</u>	<u>School</u>
1. Minnesota Public	
Alexandria	Central Junior High School
Balaton	Balaton High School
Coon Rapids	Coon Rapids Junior High School
Bloomington	Oak Grove Junior High School
Bloomington	Olson Junior High School
Buffalo Lake	Buffalo Lake High School
Cambridge	Cambridge High School
Canby	Canby High School
Chisholm	Chisholm High School
Circle Pines	Centennial Junior High School
Cloquet	Cloquet Senior High School
Crookston	Central High School
Danube	Danube High School
Grand Marais	Cook County High School
Grand Meadow	Grand Meadow High School
Hopkins	Hopkins Senior High School
Janesville	Janesville High School
Kenyon	Kenyon High School
Marshall	Marshall Senior High School
Minneapolis	Anthony Junior High School
Minneapolis	Folwell Junior High School
Minneapolis	South Senior High School
Minneota	Minneota High School
Minnesota Lake	Minnesota Lake High School
Montevideo	Central Junior High School
Montgomery	Montgomery High School
Moorhead	South Junior High School
New Hope	Cooper Senior High School
Norwood	Norwood-Young America Junior-Senior High School
Red Lake Falls	Lafayette High School
Robbinsdale	Hosterman Junior High School
Robbinsdale	Plymouth Junior High School
St. Cloud	North Junior High School
St. Cloud	South Junior High School
St. Paul	Harding Senior High School
St. Paul	Highland Park Junior High School
Slayton	Slayton High School
Spring Lake Park	Spring Lake Park Senior High School
Stillwater	Stillwater Senior High School
Thief River Falls	Lincoln Senior High School
Two Harbors	Two Harbors High School
Upsala	Upsala High School
Waconia	Waconia High School

<u>City</u>	<u>School</u>
1. Minnesota Public (continued)	
Waterville	Waterville Junior High School
Wells	Wells-Easton High School
White Bear Lake	Central Junior High School
White Bear Lake	Senior High School
White Bear Lake	Sunrise Park Junior High School
Winthrop	Winthrop High School
2. Minnesota Parochial	
Faribault	Bethlehem Academy
Minneapolis	De LaSalle High School
Minneapolis	Holy Angels High School
Minneapolis	Regina High School
Minneapolis	St. Anthony High School
Minneapolis	St. Margaret's Academy
St. Paul	Derham Hall
St. Paul	Our Lady of Peace High School
St. Paul	St. Joseph's Academy
3. Arkansas	
El Dorado	El Dorado High School
4. California	
Castro Valley	Canyon High School
Claremont	Claremont High School
Fullerton	Troy High School
Menlo Park	Convent of the Sacred Heart
Pacifica	Oceana High School
Poway	Poway High School
Stockton	A. Lincoln High School
5. Colorado	
Denver	Alameda High School
Colorado Springs	General William Mitchell High School
Fort Logan	Mullen High School
Golden	Golden Senior High School
6. Delaware	
Greenville	Alexis I. duPont High School
Wilmington	John Dickinson High School
7. Florida	
North Miami	North Miami High School

<u>City</u>	<u>School</u>
8. Hawaii	
Kailua	Kailua High School
Kamuela	Hawaii Preparatory Academy
9. Idaho	
Idaho Falls	Skyline High School
10. Illinois	
Chicago	Ridgewood High School
Decatur	Lakeview High School
Evanston	Evanston Township High School
Evanston	Boltwood High School
Evanston	Bacon High School
Evanston	Beardsley High School
Norridge	Ridgewood Community High School
Northlake	West Leyden High School
11. Iowa	
Altoona	South-East Polk Community High School
Ankeny	Ankeny Community High School
Council Bluffs	Lewis Central Community High School
Eagle Grove	Eagle Grove Middle School
Glidden	Glidden-Ralston Community High Schools
Mason City	Mason City Community High School
Montezuma	Montezuma Community High School
Pleasant Valley	Pleasant Valley Community High School
Schleswig	Schleswig Community High School
Urbandale	Urbandale Senior High School
Vinton	Washington High School
12. Massachusetts	
Concord	Concord Middle School
Groton	Groton School
13. Michigan	
Troy	Troy High School
Warren	Charles Mott High School
14. Missouri	
Kansas City	George Caleb Bingham Junior High School

<u>City</u>	<u>School</u>
14. Missouri (continued)	
Kansas City	Paseo High School
North Kansas City	Oak Park High School
15. Nebraska	
Alliance	Alliance High School
Columbus	Columbus High School
Geneva	Geneva - North High School
Hastings	Adams High School
Howells	Howells High School
Minatare	Minatare High School
Omaha	South High School
Omaha	Westside High School
Schuyler	Schuyler High School
16. Nebraska - Non Public Schools	
Alliance	St. Agnes High School
Elgin	Pope John XXIII High School
Humphrey	St. Francis High School
Lincoln	Pius X High School
North Platte	St. Patrick's High School
Omaha	Archbishop Ryan High School
Omaha	Academy of the Sacred Heart
Omaha	Holy Name High School
Omaha	Notre Dame Academy
Omaha	Duchesne Academy
O'Neill	St. Mary's High School
Randolph	St. Francis High School
17. Nevada	
Las Vegas	Rancho High School
Las Vegas	Roy Martin Junior High School
Las Vegas	Valley High School
18. New Jersey	
Hillside	Hillside High School
19. North Dakota	
Grand Forks	Schroeder Junior High School
Grand Forks	Grand Forks Senior High School
Grand Forks	South Junior High School
Grand Forks	Valley Junior High School
20. Ohio	
Athens	Athens High School

<u>City</u>	<u>School</u>
21. Pennsylvania	
Abbingdon	Abbingdon High School
22. Puerto Rico	
Rio Piedras	University of Puerto Rico Junior-Senior High School
23. South Dakota	
Ellsworth	Ellsworth Air Force Base Douglass School System
Huron	Huron High School
24. Texas	
Waco	University Junior High School
25. Washington	
Bellevue	Hyak Junior High School
Ellensburg	Ellensburg High School
Tacoma	Truman Junior High School
26. Wisconsin	
Bloomington	Bloomington Senior High School
Delavan	Delavan-Darien Union High School
Green Bay	Southwest High School
Green Bay	Green Bay East High School
Green Bay	Green Bay Preble High School
Green Bay	Green Bay West High School
Madison	James Madison Memorial High School
Mazomanie	Wisconsin Heights Senior High School
Racine	Case Senior High School
Wausau	Wausau Senior High School



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EDUCATIONAL RESEARCH and DEVELOPMENT COUNCIL
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MINNEAPOLIS, MINNESOTA 55455

AREA CODE: 612
373-4872
373-4860

APPENDIX B

**Sample of Cover Letter for
Questionnaire and Questionnaire**

Active Members:

Anoka
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Mound
Mounds View
New Prague
No. St. Paul-Maplewood
Orono
Osseo
Prior Lake
Richfield
Robbinsdale
Rosemount
Roseville
St. Anthony
St. Francis
St. Louis Park
St. Paul
Shakopee
Spring Lake Park
Stillwater
Waconia
Watertown
Wayzata
West St. Paul
White Bear Lake

Associate Members:

Delano Public Schools
Rockford Public Schools

January 23, 1970

Mr. Donald Watson, Principal
Spring Lake Park Senior High School
8000 Highway 65
Minneapolis, Minnesota 55432

Dear Mr. Watson:

The Research and Development Council of the Minneapolis-St. Paul Area is engaged in a series of activities designed to aid in the development of evaluation procedures for flexibly scheduled secondary schools. Your experience with flexible scheduling is valued and we would appreciate it if you would assist us by providing information related to the independent study phase of instruction. At this time we need additional information relevant to the procedures used by administrators and other staff members to evaluate the effectiveness of the independent study phase of instruction.

As the former principal of Spring Lake Park Senior High School, a flexibly scheduled school, I am aware of the extraordinary demands upon your time and energies; but, I would appreciate it if you would complete the enclosed questionnaire and return it to me as soon as possible. A summary of the information received will be mailed to each respondent.

Thank you for your participation.

Sincerely,

Leland Renz, Lecturer
Division of Educational Administration
203 Burton Hall
University of Minnesota
Minneapolis, Minnesota 55455

LR/rrr

Enclosure

SURVEY OF EVALUATION PROCEDURES
OF THE INDEPENDENT STUDY PHASE OF INSTRUCTION
IN FLEXIBLY SCHEDULED SECONDARY SCHOOLS

By L. S. Renz
January 1970

(Name of School Surveyed)	(Grade Levels)
(Number of Students Enrolled)	(Number of Teachers on Staff)
(Name and Position of Person Completing this Survey)	(Date)

1. Does your flexible schedule include the independent study phase of instruction? _____
2. How many students have participated in the program? _____
3. How many teachers participate in the program? _____
4. Do you have a program of evaluation for your independent study phase of instruction? _____

If your response is yes, please use the reverse side of this sheet of paper to describe briefly the evaluation program. Include the titles and functions of any instruments used in the evaluation and make a notation of those that were designed locally.

Please return this form to:

Leland S. Renz
203 Burton Hall
University of Minnesota
Minneapolis, Minnesota 55455

APPENDIX C

Modular Flexibly Scheduled Schools
With an Evaluation Program for
the Independent Study Program

<u>City</u>	<u>School</u>
1. Minnesota	
Bloomington	Oak Grove Junior High School
Bloomington	Olson Junior High School
Minneapolis	Folwell Junior High School
Minneapolis	South Senior High School
St. Paul	Highland Park Junior High School
Upsala	Upsala High School
Waconia	Waconia High School
Winthrop	Winthrop High School

2. Minnesota Parochial

St. Paul	Derham Hall
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<u>State - City</u>	<u>School</u>
3. Others	
California, Fullerton	Troy High School
Colorado, Colorado Springs	General William Mitchell High School
Delaware, Wilmington	John Dickinson High School
Hawaii, Kamuela	Hawaii Preparatory Academy
Hawaii, Kailua	Kailua High School
Idaho, Idaho Falls	Skyline High School
Illinois, Evanston	Michael High School
Illinois, Norridge	Ridgewood Community High School
Iowa, Des Moines	South-East Polk Community High School
Iowa, Glidden	Glidden-Ralston Community High Schools
Iowa, Urbandale	Urbandale Community High School
Nebraska, North Platte	St. Patrick's High School
Nebraska, Omaha	Archbishop Ryan High School
Nebraska, O'Neill	St. Mary's High School
Nebraska, Randolph	St. Francis High School
Nevada, Las Vegas	Roy Martin Junior High School
Ohio, Athens	Athens High School
Pennsylvania, Abbington	Abbington High School - North Campus

<u>State - City</u>	<u>School</u>
3. Others (continued)	
Wisconsin, Delavan	Delavan-Darien Union High School
Wisconsin, Green Bay	Southwest High School